

### REMARKS

In the Office Action dated May 19, 2006, claims 1 through 5 are pending in the subject application. Claims 1 and 4 stand rejected and objection is made to claims 2, 3 and 5. Applicants appreciate the acknowledgement of patentable subject matter, at least in claims 2, 3 and 5.

Claims 1 and 4 have been cancelled to facilitate prompt allowance of this application. Applicants reserve the right to pursue additional protection in a continuation application.

Claims 1 and 4 are rejected under 35 U.S.C. §102(b) over Shirashi. Shirashi discloses an electrophotographic printer having a plurality of transferring devices, each opposed to a plurality of image bearing bodies. "Each of the transferring devices selectively receives a first voltage (i.e., transfer voltage  $v_a$ ) and a second voltage (i.e., non-transfer voltage  $v_b$ ) supplied thereto. The first voltage is received when an image of a corresponding color is being transferred . . . to the print medium. The second voltage is received when the image of the corresponding color is **not** being transferred . . . to the print medium." [Col. 2, lines 12-20; emphasis added.] Thus, a voltage is always being applied to each of the transfer devices 17, **whether or not the corresponding image carrier 11 is in contact**; only the magnitude changes depending upon whether transfer is occurring.

In the present invention, there are two basic situations; transferring either a color image of a black image to successive media sheets. In the color mode, all of the image forming stations are in contact with the corresponding transfer electrodes. When a media sheet is between the image forming station and the transfer electrode, a transfer process is being performed and a transfer bias is applied to the transfer electrode. When **no** media is between the image forming station and the transfer electrode (i.e., gaps between sheets), a transfer process is **not** being

performed and a non-transfer bias is applied to the transfer electrode. In the color mode all transfer electrodes are in contact with the corresponding image forming station and a non-transfer bias voltage is applied to all transfer electrodes when a transfer process is **not** being performed.

However, for example, in a black printing mode, as shown in FIG. 2, the color image forming stations are not in contact with their corresponding transfer electrodes. Thus, in accord with the invention, when a transfer process is **not** being performed, a non-transfer bias voltage is applied **only** to the transfer electrode corresponding to the black image forming station. The electrodes corresponding to the color image forming stations are **not** in contact and **no** non-transfer bias voltage is applied to them. Thus, the operation of the apparatus of the present invention is substantially different from the apparatus of Shiraishi.

The Examiner states on page 3 of the Office action:

During a mono-chrome image formation (solid line in Fig. 2) where only one transfer roller will be in contact (via the transfer belt) with the image carrier the same ideas apply however applicant is silent a[s] to the bias of the out-of -contact transfer rollers.

However, Applicants are not silent. At page 6, lines 3-7 of the specification, Applicants specifically state:

The non-transfer bias voltage is **not applied** to transfer electrodes that are **not in contact** with the image carriers when the transfer process is **not performed**. [Emphasis added.]

This, in combination with FIG. 2, clearly informs one skilled in the art how to perform a mono-chrome image in accord with the present invention.

From the above discussion, it can be seen that Shiraishi *fails* to teach or suggest an image forming apparatus wherein the voltage applying device, when a transfer process is not performed, applies a non-transfer bias voltage to only the transfer electrode in contact with the

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image carrier, the non-transfer bias voltage having the same polarity as transfer bias voltage and being lower than a transfer bias voltage, as claimed herein.

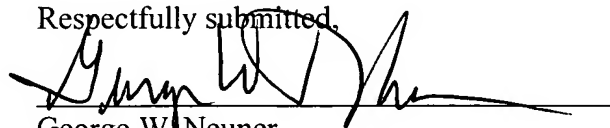
Thus, it is not seen how the present invention is anticipated by Shiraishi. Nor is it seen how the present invention would have been obvious to one of ordinary skill in the art in view of Shiraishi.

In view of the discussion above it is respectfully submitted that the present application is in condition for allowance. An early reconsideration and notice of allowance are earnestly solicited.

Applicants believe that no extension of time is required. Applicants, however, conditionally petition for an extension of time to provide for the possibility that such a petition has been inadvertently overlooked and is required. As provided below, charge Deposit Account **04-1105** for any required fee.

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Respectfully submitted,

  
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